

Customer No.: 31561
Docket No.: 12595-US-PA
Application No.: 10/711,622

In The Claims:

Claim 1. (currently amended) A polishing pad having a polishing top surface, a back surface, and a sidewall connected to the polishing top surface and the back surface, and the polishing pad comprising: is divided into a polishing region and a region neighboring to the polishing region, characterized in that:

a polishing region; and

at least one stress buffer pattern disposed in a the region neighboring to the polishing region, wherein the stress buffer pattern comprises a plurality of trenches or at least one opening having a first depth less than a thickness of the polishing pad.

Claim 2. (currently amended) The polishing pad according to claim 1, wherein the stress buffer pattern in the region is disposed formed on the polishing top surface.

Claim 3. (currently amended) The polishing pad according to claim 1, wherein the stress buffer pattern in the region is disposed formed on the back surface.

Claim 4. (currently amended) The polishing pad according to claim 1, wherein the stress buffer pattern in the region is disposed formed on both the polishing top surface and the back surface.

Claim 5. (cancelled)

Claim 6. (currently amended) The polishing pad according to claim 5 1, wherein the first depth of the trenches or the opening is less than half of the thickness of the polishing pad.

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Claim 7. (currently amended) The polishing pad according to claim 1, wherein a cambered surface is further formed on the sidewall, while the cambered surface is adjacent to the polishing top surface.

Claim 8. (currently amended) The polishing pad according to claim 1, wherein a cambered surface is further formed on a side surface of the stress buffer pattern, while the cambered surface is adjacent to the polishing top surface.

Claim 9. (currently amended) The polishing pad according to claim 1, wherein the stress buffer pattern is disposed in a central region of the polishing pad the polishing pad is a circular polishing pad and the region having the stress buffer pattern therein is a central region neighboring to the polishing region so that.

Claim 10. (currently amended) The polishing pad according to claim 1, wherein the stress buffer pattern is disposed in an edge region of the polishing pad beside the polishing region the polishing pad is a linear polishing pad and the region having the stress buffer pattern therein is a edge region beside the polishing region.

Claim 11. (currently amended) A method for fabricating a polishing pad having a polishing top surface, a back surface, and a sidewall connected to the polishing top surface and the back surface, and the polishing pad is divided into a polishing region and a region neighboring to the polishing region, the method comprising forming a polishing region and a stress buffer pattern in a the region neighboring to the polishing region, wherein the stress buffer

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pattern comprises a plurality of trenches or at least one opening having a first depth less than a thickness of the polishing pad.

Claim 12. (original) The method according to claim 11, wherein the stress buffer pattern is formed via a mechanical process, a chemical process or a molding process.

Claim 13. (currently amended) The method according to claim 11, wherein the stress buffer pattern in the region is formed on the polishing top surface.

Claim 14. (currently amended) The method according to claim 11, wherein the stress buffer pattern in the region is formed on the back surface.

Claim 15. (currently amended) The method according to claim 11, wherein the stress buffer pattern in the region is formed on both the polishing top surface and the back surface.

Claim 16. (currently amended) The method according to claim 11, further comprising formation of at least one cambered surface on the sidewall adjacent to the polishing top surface so as to prevent particles from being generated due to abrasion of the sidewall during a polishing process.

Claim 17. (original) The method according to claim 16, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.

Claim 18. (currently amended) The method according to claim 11, further comprising formation of at least one cambered surface at the join of the polishing top surface and a side surface of the stress buffer pattern.

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Claim 19. (original) The method according to claim 18, wherein the cambered surface is formed via a mechanical process, a chemical process or a molding process.

Claim 20. (original) The method according to claim 11, wherein the stress buffer pattern is formed in a central region of the polishing pad.

Claim 21. (original) The method according to claim 11, wherein the stress buffer pattern is formed in an edge region of the polishing pad beside the polishing region.

Claims 22-24 (cancelled).

Claim 25 (new) The polishing pad according to claim 1, wherein the top surface further includes a plurality of trenches with a second depth thereon for polishing slurry distribution.

Claim 26 (new) The polishing pad according to claim 25, wherein the first depth is greater than the second depth.

Claim 27 (new) The polishing pad according to claim 11, wherein the top surface further includes a plurality of trenches with a second depth thereon thereon for polishing slurry distribution.

Claim 28 (new) The polishing pad according to claim 27, wherein the first depth is greater than the second depth.